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Effect of Critical Incident Stress Debriefings on Provider Wellbeing after Adverse Events in the Department of Obstetrics and Gynecology at a Single Tertiary Care Hospital

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Abstract

Critical incident stress debriefings (CISDs) were established at this institution in response to critical events. In this cross-sectional qualitative study, we aim to understand the impact of CISDs on provider well-being after an adverse outcome. The study population included 25 physicians, resident physicians, and nurse-midwives who participated in debriefings since their introduction in 2019 within the Department of Obstetrics and Gynecology at a single tertiary care hospital. An anonymous survey was sent to the study population with a response rate of 72% (n = 18). The majority of survey questions were positive statements regarding the beneficial effect of the CISD on provider well-being, and these statements were agreed with or strongly agreed with between 61.1% to 88.9% of the time. Of note, all of the responses that disagreed or strongly disagreed with these statements were from faculty participants. The one faculty member that disagreed with all positive statements responded that he/she sought additional support following this debriefing. None of the participants responded that the debriefing was a burden. Overall, the CISD was found to have a positive effect on provider well-being after adverse outcomes, especially in the resident physician group.

Keywords

Adverse Events, Health and Safety, Obstetrics, Education and Training, Second Victim, Critical Incident Stress Debriefing

1. Introduction

The term "second victim" was first introduced by Albert Wu (2000), who described feelings of guilt and shame that plague healthcare professionals involved in adverse patient events. Even though efforts are made to provide the best care possible to the patient, medical errors and adverse events are inevitable due to intrinsic human fallibility and highly complex clinical environments (Wienke, 2013). Obstetrics is a field in which patients and healthcare professionals expect and work towards a positive experience and good outcome; however, unintended outcomes associated with pregnancy and labor can include but are not limited to postpartum hemorrhage, eclampsia, sepsis, renal complications, pulmonary complications, cardiac complications, and even fetal and maternal death (American College of Obstetricians and Gynecologists and the Society for Maternal Fetal Medicine, Kilpatrick SK, & Ecker JL, 2016). When expectations are not met, feelings of devastation can be overwhelming and go as far as to engender litigation (Adinma, 2016). Despite our knowledge of the long-lasting negative effects providers can experience after the occurrence of an adverse outcome, such as burnout, depression, anxiety, posttraumatic stress disorder, and documented desire for additional assistance, many still feel a lack of institutional support (Robertson & Long, 2018; Heiss & Clifton, 2019).

In order to address this paucity of support, several institutions have developed formal support programs to help healthcare providers cope with their emotions in a confidential, non-judgmental environment. Johns Hopkins Hospital's multi-disciplinary Second Victims Work Group and RISE (Resilience in Stressful Events) program provide safe spaces for hospital staff to explore their emotions in the aftermath of a traumatic event (Wu & Steckelberg, 2012; Edrees et al., 2016; Scott et al., 2010). At the University of Missouri, a Second Victim Rapid Response Team, named "forYou", was introduced and has been widely replicated (Scott et al., 2010; Merandi et al., 2017). In the development of these programs, it was found (Scott et al., 2010) that emotional and informational support by colleagues, a mentor, or a supervisor are the most requested and most useful strategies to implement. However, there have been no follow up studies of the efficacy and impact of these programs (Harrison & Wu, 2017).

At the University Hospitals Cleveland Medical Center (UHCMC) Department of Obstetrics and Gynecology, a program was established in 2019 to provide a critical incident stress debriefing (CISD) in response to critical events. The purpose of this study is to understand the impact of a CISD on provider wellbeing after an adverse outcome in the Department of Obstetrics and Gynecology at UHCMC. 2. Ease of Use (Heading 2).

2. Methods

Critical events were defined as litigation and anything that would normally generate a root cause analysis, including but not limited to: maternal death, intrapartum fetal death, shoulder dystocia, intraoperative death, code blue, major

medical error, or surgical complication. The format and content of the CISD was developed based on the seven stage Mitchell model. Debriefings occurred on the Wednesday after a critical event. They were led by a trained physician not involved in the incident and includes all involved attending physicians, nurse-midwives, and residents. During a debriefing, all participants had the opportunity to share their personal experience with the event and emotions surrounding the event. Each session began with an introduction of the purpose of the session by the leading physician. Participants then introduced themselves. They discussed the facts surrounding the event including when they first met the patient and how they were involved in their care. They shared what it was like caring for the patient, what they found difficult or distressing, and what they found satisfying. They then delved into their response to the adverse event, what they had experienced since caring for the patient, how it had impacted their lives and practice. The physical, emotional, cognitive, and behavioral effects were discussed, followed by coping strategies, both adaptive and maladaptive. Strategies for self-care are shared and suggestions for institutional support were elicited. Lessons learned from the patient's care were shared. Each session was concluded with the participants' final thoughts and steps moving forward. Resources for individualized support were provided at the end of the debriefing.

For this study, we identified resident physicians and faculty (physicians and nurse-midwives) who participated in the CISDs since their introduction in 2019. We electronically distributed a RedCap survey including ten positive statements and two additional statements regarding effects of the CISD, referred to as a facilitated debrief, on provider wellbeing. The UH IRB determined that the study protocol met the criteria for exemption from IRB review. Results were then qualitatively analyzed.

3. Results

We sent the survey to the 25 resident physicians and faculty who participated in a CISD after an adverse event. 18 subjects (10 residents and 8 faculty members) completed the survey for a response rate of 72%. Overall, subjects agreed with or strongly agreed with the positive statement survey questions 61.1% to 88.9% of the time (Table 1). All resident physician subjects agreed with or strongly agreed with the positive statement survey questions 70% to 100% of the time. Faculty subjects agreed with or strongly agreed with the positive statement survey questions 25% to 75% of the time. Of note, all the responses that disagreed or strongly disagreed with these statements were from faculty participants. The one faculty member that disagreed with all positive statements reported that they sought additional support following this debriefing. None of the participants responded that the debriefing was a burden (Table 2).

4. Discussion

Overall, the CISD was found to have a positive effect on provider wellbeing after

Table 1. Responses to positive statements from faculty and residents surveyed.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The debrief was a safe, non-punitive space to discuss the adverse event.	1 (5.6%)	1 (5.6%)	0 (0%)	3 (16.7%)	13 (72.2%)
The debrief assisted in re-evaluating the scenario and providing insight/perspective.	2 (11.1%)	1 (5.6%)	0 (0%)	5 (27.8%)	10 (55.6%)
The debrief improved feelings of internal inadequacy and bolstered my confidence in my knowledge and skills.	0 (0%)	2 (11.1%)	3 (16.7%)	10 (55.6%)	3 (16.7%)
The debrief helped restore personal integrity and feelings of acceptance among work/social structure.	1 (5.6%)	1 (5.6%)	5 (27.8%)	5 (27.8%)	6 (33.3%)
The debrief lessened physical and psychosocial symptoms incurred from the event.	1 (5.6%)	1 (5.6%)	3 (16.7%)	11 (61.1%)	2 (11.1%)
The debrief improved the experience of the formal institutional follow up (RCA, MMM, etc.).	0 (0%)	1 (5.6%)	6 (33.3%)	7 (38.9%)	4 (22.2%)
The debrief facilitated moving on from the incident and returning to a normal work/life balance.	0 (0%)	1 (5.6%)	2 (11.1%)	12 (66.7%)	3 (16.7%)
I am glad that the debrief was held, as I would not have sought other personal/professional support.	0 (0%)	2 (11.1%)	5 (27.8%)	2 (11.1%)	10 (50%)
By having a formal response to the adverse outcome, I felt valued and supported by my department.	0 (0%)	1 (5.6%)	1 (5.6%)	6 (33.3%)	10 (55.6%)
The sessions have decreased the stigma surrounding being involved in an adverse outcome.	1 (5.6%)	0 (0%)	1 (5.6%)	8 (44.4%)	8 (44.4%)

Table 2. Responses to additional statements from faculty and residents surveyed.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I sought additional support following the facilitated debrief.	4 (22.2%)	7 (38.9%)	2 (11.1%)	4 (22.2%)	0 (0%)
The time for the facilitated debrief was a burden and I wish it was not scheduled.	10 (55.6%)	7 (38.9%)	1 (5.6%)	0 (0%)	0 (0%)

adverse outcomes, especially in the resident physician group. These findings are consistent with a study done by Pettker et al. (2017) that revealed that, in a maternity care setting, trainees preferred discussing adverse events with a trusted peer as a support option whereas in supervising physicians this desire was less pronounced. In addition, they found that physicians in training were more likely to feel that their colleagues are indifferent to or may judge the impact of an adverse outcome. This highlights the utility of CISDs in normalizing the negative feelings that arise from an adverse outcome and providing a safe outlet in a supportive setting, especially for resident physicians who build upon these experiences to develop future practice patterns and responses to medical error (Gray et al., 2006; Engel et al., 2006).

These results also suggest that the CISD alone is insufficient, and additional support should be offered, particularly for faculty. Critical incident stress debriefings (CISD) are designed for small, homogenous groups who are unified by

their experience of a traumatic event (McCabe et al., 2014). They provide a form of psychological first-aid in the immediate aftermath of an event to reduce feelings of distress and promote a sense of collective efficacy and cohesion. Scott et al. (2009) describes that after obtaining emotional first aid, there are three paths providers can take to move on: drop out, survive, or thrive. While debriefings can play a role in helping clinicians cope, other forms of support may be necessary. Other crisis support services may include pre-event education, follow-up services, and referral to professional care (i.e. counseling, employee assistance programs) and post-incident education programs.

5. Limitations

Limitations of this study include a small sample size in one department at a single center, possibly affecting the generalizability of the findings to clinicians in other specialties and institutions. Adverse outcomes are relatively uncommon and thus are hard to study. While previous studies (Tuckey & Scott, 2014; Everly & Boyle, 1999) have shown that CISDs are effective in reducing the negative psychological effects of a wide variety of critical incidents, more studies are needed to guide practice related to adverse patient events. Further studies should investigate the impact of different second victim support services, including debriefings, on improving provider well-being after adverse outcomes.

6. Conclusion

The critical incident stress debriefings were found to have a positive effect on the overall well-being of faculty physicians and resident physicians after adverse patient events. They can be a useful strategy implemented institutionally to support providers who have experienced an adverse event.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

References

Adinma, J. (2016). Litigations and the Obstetrician in Clinical Practice. *Annals of Medical and Health Science Research, 6,* 74-79. https://doi.org/10.4103/2141-9248.181847

American College of Obstetricians and Gynecologists and the Society for Maternal Fetal Medicine, Kilpatrick, S. K., & Ecker, J. L. (2016). Severe Maternal Morbidity: Screening and Review. *American Journal of Obstetrics and Gynecology, 215,* B17-B22. https://doi.org/10.1016/j.ajog.2016.07.050

Edrees, H., Connors, C., Paine, L. et al. (2016). Implementing the RISE Second Victim Support Programme at the Johns Hopkins Hospital: A Case Study. *BMJ Open, 6,* e011708. https://doi.org/10.1136/bmjopen-2016-011708

Engel, K. G., Rosenthal, M., & Sutcliffe, K. M. (2006). Residents' Responses to Medical Error: Coping, Learning, and Change. *Academic Medicine, 81,* 86-93. https://doi.org/10.1097/00001888-200601000-00021

Everly Jr., G. S., & Boyle, S. H. (1999). Critical Incident Stress Debriefing (CISD): A Meta-Analysis. *International Journal of Emergency Mental Health, 1,* 165-168.

Gray, M. J., Litz, B. T., & Papa, A. (2006). Crisis Debriefing: What Helps, and What Might Not. *Current Psychiatry, 5,* 17-29.

Harrison, R., & Wu, A. (2017). Critical Incident Stress Debriefing after Adverse Patient Safety Events. *The American Journal of Managed Care, 23,* 310-312.

Heiss, K., & Clifton, M. (2019). The Unmeasured Quality Metric: Burn out and the Second Victim Syndrome in Healthcare. *Seminars in Pediatric Surgery, 28,* 189-194. https://doi.org/10.1053/j.sempedsurg.2019.04.011

McCabe, O. L., Everly Jr., G. S., Brown, L. M. et al. (2014). Psychological First Aid: A Consensus-Derived, Empirically Supported, Competency-Based Training Model. *American Journal of Public Health, 104,* 621-628. https://doi.org/10.2105/AJPH.2013.301219

Merandi, J., Liao, N., Lewe, D. et al. (2017). Deployment of a Second Victim Peer Support Program: A Replication Study. *Pediatric Quality and Safety, 2,* e031. https://doi.org/10.1097/pq9.0000000000000031

Pettker, C. M. (2017). Systematic Approaches to Adverse Events in Obstetrics, Part II: Event Analysis and Response. *Seminars in Perinatology, 41,* 156-160. https://doi.org/10.1053/j.semperi.2017.03.004

Robertson, J. J., & Long, B. (2018). Suffering in Silence: Medical Error and Its Impact on Health Care Providers. *Journal of Emergency Medicine, 54,* 402-409. https://doi.org/10.1016/j.jemermed.2017.12.001

Scott, S. D., Hirschinger, L. E., Cox, K. R. et al. (2009). The Natural History of Recovery for the Healthcare Provider "Second Victim" after Adverse Patient Events. *BMJ Quality & Safety, 18,* 325-330. https://doi.org/10.1136/qshc.2009.032870

Scott, S. D., Hirschinger, L. E., Cox, K. R. et al. (2010). Caring for Our Own: Deploying a Systemwide Second Victim Rapid Response Team. *The Joint Commission Journal on Quality and Patient Safety, 36,* 233-240. https://doi.org/10.1016/S1553-7250(10)36038-7

Tuckey, M. R., & Scott, J. E. (2014). Group Critical Incident Stress Debriefing with Emergency Services Personnel: A Randomized Controlled Trial. *Anxiety, Stress & Coping, 27,* 38-54. https://doi.org/10.1080/10615806.2013.809421

Wienke, A. (2013). Errors and Pitfalls: Briefing and Accusation of Medical Malpractice—The Second Victim. *GMS Current Topics in Otorhinolaryngology—Head and Neck Surgery, 12.*

Wu, A. W. (2000). Medical Error: The Second Victim. The Doctor Who Makes the Mistake Needs Help Too. *BMJ, 320,* 726-727. https://doi.org/10.1136/bmj.320.7237.726

Wu, A. W., & Steckelberg, R. C. (2012). Medical Error, Incident Investigation and the Second Victim: Doing Better but Feeling Worse? *BMJ Quality & Safety, 21,* 267-270. https://doi.org/10.1136/bmjqs-2011-000605